



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Lindb. and *Stereodon revolutus* Mitt. belong to the same species. *S. revolutus*, Fig. 3, has the leaves with broadly revolute margins, the cross-section of stem with small outer cells, etc. *S. plicatulus*, Figs. 1, 2 and 4, on the contrary, has the leaves broadly triangular with long acumen and plane margins, the outer cells of the cross-section of stem are much larger, etc. *S. plicatulus* Lindb. is thus very different from *S. revolutus* Mitt. and is much nearer related to *S. callichroum* Brid., Fig. 5, and in my opinion a very good species, which thus not only is found in Siberia and East Russia, but also in North America.

Helsingfors, Finland, May 21, 1903.

THE MOSSES OF ALASKA.

By J. CARDOT and I. THERIOT

From "Papers from the Harriman Alaska Expedition."

(CONCLUDED.)

POLYTRICHUM YUKONENSE Card. and Thér.

Stem 5-8 cm. high, simple or sparingly branched, denuded of leaves for a long distance, covered at base with a white tomentum. Leaves rigid, sub-erect when dry, erect-spreading when moist, 4-6 mm. long, 8 broad, appressed from a subsheathing yellowish base, shortly linear-acuminate, tapering into an entire fuscous tip, erect entire margins. lamellæ about thirty, crenulate on margin, composed of eight to twelve cells in transverse section, the apical cell larger and deeply emarginate. Other characters unknown.

From Yukon River (W. H. Dall, in 1867).

This species is easily distinguished from the smaller forms of *P. commune* by its short and entire leaves, its higher lamellæ with more deeply crenated borders and more strongly emarginated marginal cells.

A recently described species, *P. Jensenii* Hagen (*P. fragilifolium* Lindb. fil. mss.), which has been found in Greenland, Spitzbergen, Lapland and Wyoming, comes very near our *P. Yukonense* by its size and the height and structure of its lamellæ, but differs from it by its leaves being longer and dentate at the point, by the cells of the basilar and subvaginant part, which are wider, and by the much less emarginated apical cells of the lamellæ.

BRACHYTHECIUM BERINGIANUM Card. and Thér.

Densely caespitose, resembling in habit small forms of *B. albicans*. Stem erect, 3-4 cm. high, much branched, branches erect, sometimes fastigiate, julaceous, acute. Leaves crowded, imbricate, the stem leaves 1.5 mm. long, 0.8 broad, ovate-lanceolate, from a slightly decurrent base, quite abruptly and short-acuminate, concave, plicate, with entire margins, plane or reflexed, the branch leaves smaller, longer acuminate, costa thin, 30-35 μ broad at base, extending barely to the middle, often forked and sometimes very short; alar cells numerous, quadrate, elongated in the five to six rows next to the margin, the rest linear, 40-45 μ long, 6-7 broad. Walls incrassate. Other characters unknown.

From St. Paul Island (Trelease, 1861, 2087); Agattu Island (U. S. S. *Albatross* Exped., 40).

Distinct from *B. acuminatum* Ren. and Card, by its habit, its more abruptly acuminate leaves, etc. It more closely resembles *B. albicans* Br. Eur., from which it differs by its shorter and more abruptly acuminate leaves, its quadrate, more numerous alar cells, its more chlorophyllose areolation, and by its narrower, short and often bifurcate costa.

PLAGIOTHECIUM FALLAX Card and Ther.

Dioicous, robust, yellowish-green, glossy. stem prostrate or decumbent, 5-8 cm. long, flexuous, sparingly branched, often radiculose at the attenuate apex. Leaves loosely complanate-distichous, subundulate-crispulate when dry, 2.5 mm. long, 1-1.3 broad, not all decurrent at base, oblong-lanceolate asymmetric, broadly short-acuminate, plicate, margins plane, entire, costa double, unequal, the longer branch extending one-third to one-half the length of leaf; basal cells few quadrate or short-rectangular, the others linear 125-225 long, 9-14 broad; Other Characters unknown.

From Douglas Island (Trelease, 1743 in part).

Resembling in habit the species of the *denticulatum* group, but very distinct by its leaves being not decurrent.

AMBLYTEGIUM SERPENS BERINGIANUM Card. and Ther.

Differs from the typical form in the broader ovate-lanceolate leaves with shorter acumen, in the stronger costa extending to the base of the acumen, and in the rectangular basal cells with incrassate walls.

From St. Paul Island (Trelease, 2089 in part).

Under Number 1760 we found some stems of a stouter species much resembling *A. radicale* (P. Beauv.) Mitt.

AMBLYTEGIUM SERPENS BERINGIANUM Card. and Ther.

Very robust, densely branched in broad depressed tufts, leaves very short, broadly ovate, constricted below, shortly and narrowly acuminate, alar cells much larger, inflated.

From Muir Glacier (Trelease, 1752).

HYPNUM TRELEASEI Ren.

Densely caespitose, fragile, yellowish-green. Stem short, 2-3 cm. high, erect, radiculose below, branches erect, fastigiate. Leaves crowded, small, subimbricate, sometimes subhomomallous, 1.2 mm long, 0.6 broad, ovate-lanceolate, rather short-acuminate, scarcely plicate generally suddenly narrowed, minutely denticulate, costa double, short basal cells quadrate or short rectangular, chlorophyllose, the outer cells elongated, decurrent, the rest linear, 30-40 μ long, 6-7 broad. Other Characters unknown.

From Virgin Bay (Trelease, 2305); St. Matthew Island (Trelease, 2158, 2165).

The description here given, as also the drawing, is based on the St. Matthew Island specimens. The virgin Bay specimen has the leaves longer, with a more elongated and narrower acumen and a closer areolation, formed of longer and narrower cells. This is, however, no doubt of the specific identity of the two specimens. This species should be placed near *H. stellatum* Schreb., from which it is distinguished by its much smaller dimensions, its short and fastigiate stems, its leaves which are small, imbricate, shortly

acuminate and for the most part finely denticulate, and finally, by its small quadrate alar cells, the median ones shorter.

HYPNUM UNCINATUM POLARE Ren.

In habit resembling a variety of *plumosum*, but the basal areolation is laxer, parenchymous, median cells shorter, more chlorophyllose.

From St. Matthew Island (Trelease, 2159); Plover Bay, Siberia (Trelease, 1977).

HYPNUM SULCATUM STENODICTYON Ren.

Distinguished from the typical form by the closer areolation and narrower cells.

From Muir Glacier (Trelease, 2019).

HYPNUM SUBEUGYRIUM OCCIDENTALE Card. and Thér.

Differs from the typical form of the new world as a rule, in the broader, softer, more concave leaves, entire apex, slightly larger alar cells forming sometimes subinflated auricles but always much less distinct than in *H. eugyrium*. Costa sometimes subsimple.

From Hidden Glacier Inlet, Yakutat Bay (Trelease, 1784); Muir Glacier (Trelease, 1805).

HYPNUM SARMENTOSUM BERINGIANUM Card. and Thér.

Differs from the typical form in the more slender stems, more laxly foliate, in the broader costa and especially in the much smaller usually quadrate, scarcely dilated alar cells.

From St. Matthew Island (Trelease, 1888, in part 1889).

By the structure of the angles of the leaf, this moss comes near *H. brunneo-fuscum* C. Muel. from the Chukchi Peninsula, but the latter has a different facies, a closer areolation and a much thinner costa.

HYPNUM PLESIOSTRAMINEUM Ren.

Tufts loose, soft. Stems slender, erect, 4-6 cm high, simple or sparingly branched, branches slender. Leaves quite crowded, erect, only a little spreading at apex, about 1.4 mm. long, .6 broad, various shapes, the lower ovate-oblong or subdeltoid, acuminate, subobtuse, the upper elliptical with a broader and more obtuse acumen, the branch leaves ovate, round-obtuse, all plicate, slightly sinuate, plane margins. Costa thin, extending about three-fourths or further, 40-50 μ broad at base, alar cells large, lax, hyaline, forming inflated beautifully distinct auricles, the median narrowly linear, flexuous prosenchymatous, 40-60 μ long, 5-6 broad, the apical shorter ovate or subhexagonal. Other characters unknown.

From Yukon River (W. H. Dall, in 1867).

This species resembles *H. stramineum* Dicks. and *H. pseudo-stramineum* C. Muel., but it is with the latter that it has the closest affinity. It differs from it by its leaves being shorter, subdeltoid, with a costa thicker (40-50 μ instead of 30-40), longer, usually exceeding the three-fourths, and finally by the firm areolation formed of flexuous cells, rather obtuse (not truncate) at the ends, with thick walls, and resembling those of *Hygrohypnum*.

Note 3, p. 347)—A preliminary diagnosis of this moss has been published

by Mr. Renauld in THE BRYOLOGIST IV, p. 65. It is perhaps the same species as *H. amplyphyllum* Williams, in Bull. N. Y. Garden, II, p. 139.

HYLOCOMIUM TRIQUETRUM BERINGIANUM Card. and Thér.

Leaves yellowish, erect imbricate, subhomomallous less distinctly papillose.

From Hall Island (Trelease, 1989 in part; Coville and Kearney, 2059).

From the Botanical Gazette, July, 1896.

NEW MOSSES OF NORTH AMERICA.

F. RENAULD AND J. CARDOT.

GYMNOSTOMUM CALCAREUM N. et H. var. WINONENSE Holz.

Differs from the var. *tenellum* Sch. by the leaves acute and the capsule not constricted at the mouth. Very small and loosely cespitose or gregarious.

Minnesota: Winona, amongst the stems of *Myurella Careyana* (J. M. Holzinger, 1893).

DICRANUM DEMETRII R. and C.

In very compact, yellowish-green tufts, brownish and a little tomentose below. Stems erect, simple or sparingly branched, three to four inches long. Leaves crowded, erecto-patent when moist, crispate when dry, from an oblong-obovate base rather suddenly constricted and linear-subulate, canaliculate, smooth, quite entire or subsinuate at apex, 3-6 mm. long, 0.30-0.60 mm. broad at base; costa narrow, percurrent or subexcurrent; cells smooth, small; quadrate or short-rectangular and incrassate in the upper part, becoming narrowly linear and slightly posose towards the base near the costa, the alar looser, subrectangular. Pericheatial leaves from an oblong sheathing base suddenly long-cuspidate. Fruit unknown. Seems dioicous.

Labrador: Rattler's Bight (*Rev. A. C. Waghorne*, 1892; comm. *Rev. C. H. Demetrio*). Specimens bearing young fructifications and remains of old pedicels.

Seems to have some affinities with *D. elongatum* Schw., but is readily distinguished at first sight from this species by its leaves crisped in the dry state, which gives it rather the appearance of *D. montanum* Hedw., and also by the very different areolation of the leaves.

DICRANUM TRACHYPHYLLUM R. and C.

Dioicous, cespitose, green or olivaceous. Stems erect, 2-6 cm. long, simple or branching, sparingly tomentose in the lower part. Leaves falcate or flexuous-patent when moist, flexuous-crisped when dry, often tufted, linear-lanceolate, canaliculate above and rather thickly subulate, strongly serrate on the margins, spinulose-dentate at apex; costa stout, about one-fourth the width of leaf-base, generally very rough at back, percurrent or short-excurrent into a spinulose-dentate point; cells of the upper part quadrate or subrotundate, mostly papillose on the back, oblong or linear and smooth towards the base, the alar lax, inflated brownish or hyaline. Per-